

I-01.01 Purpose

This manual has been prepared to provide Design Division and Bridge Division personnel, as well as other parties performing design work for the department, with a convenient guide for the policies, procedures, and design values that are presently recommended for the development of plans for federal or state-funded highway construction in the State of North Dakota.

This Design Manual is designed to provide guidance on all design activities for the various levels of federal aid streets and highways in North Dakota, from the Interstate system to local streets and highways. The manual also provides guidance on certain state-funded activities, such as maintenance type projects.

Design guidance in this manual consists primarily of information on minimum standards to be followed in design work for the department. General guidance from federal or national organizations, such as the FHWA or AASHTO, is included in the manual by reference.

It does not contain data or design methods that are adequately covered in college textbooks or engineering handbooks, nor does it presume to answer or anticipate all situations which may arise. It does provide a means of conveying the department's experience in the various aspects of highway design, with the expectation that this information used together with good judgement will enable employees, consultants, or other parties doing design work to develop detail plans with a minimum of effort and indecision.

Each user should follow the instructions contained in this manual and thereby achieve a more consistent and uniform application of the department's policies and procedures.

Should conflicts exist between this manual and the Standard Specifications or FHWA or AASHTO, the Standard Specifications will prevail.

I-01.02 Arrangement of Manual

This manual consists of six chapters. Chapter I deals with general design information, Chapter II deals with preliminary engineering activities and environmental studies, Chapter III provides detailed guidance on roadway design, Chapter IV covers structural design, Chapter V covers hydraulic studies and drainage design, and Chapter VI contains the department's CADD Manual. When the manual is converted to an electronic document, the index will be provided with an electronic search capability. The Design Manual is located on the web at www.state.nd.us/dot/designmanual.html or at www.dot.state.nd.us/, click "Manuals", "Design Manual", "Design Manual".